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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,058	07/24/2001	Masayoshi Kobayashi	P/2291-103	6067

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EXAMINER

PHILLIPS, HASSAN A

ART UNIT	PAPER NUMBER
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2151

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/915,058

Applicant(s)

KOBAYASHI, MASAYOSHI

Examiner

Hassan Phillips

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This action is in response to communications filed on August 4, 2005.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 4, 2005 has been entered.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3, and 6-13, are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation, "wherein the relay server does not comprise a portion of the path between the server and the information-request source" was not

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described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. The limitation, as it stands, suggests that the relay server is not part of the network. Henceforth, if the relay server is not part of the network, the relay server would not be able to receive upstream information transferred through the path or transmit the same downstream. In order to advance prosecution, Examiner has omitted the limitation from the claims in this response.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

6. Claims 1-3, and 6-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The limitation, "wherein the relay server does not comprise a portion of the path between the server and the information-request source", fails to particularly point out and distinctly claim subject matter which applicant regards as the invention. In order to advance prosecution, Examiner has omitted the limitation from the claims in this response.

### ***Response to Arguments***

7. Applicant's arguments filed June 24, 2005 have been fully considered but they are not persuasive. Applicant argued that Neither Applicant's admitted prior art or

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Stiller disclose a "relay server adjacent to one of the routers". Examiner respectfully disagrees.

8. Regarding Applicant's arguments, Stiller clearly teaches nodes (10) as routers and relay servers, (col. 7, lines 2-26). Stiller discloses a relay server adjacent to one of the routers where Stiller mentions nodes receiving data from neighboring nodes, determining if it is a relay node, and retransmitting the data, (col. 7, lines 4-20). It can further be seen in Figure 1, that relay servers are adjacent to routers.

9. Accordingly the references supplied by the examiner in the previous office action covers the claimed limitations. The rejections are thus sustained. Applicant is requested to review the prior art of record for further consideration.

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-3, 6-8, 11, 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicants Admitted Prior Art (AAPA), in view of Stiller et al. (hereinafter Stiller), U.S. Patent 6,130,881.

12. In considering claims 1, 6, and 11, AAPA shows a method, system, and recording medium for transferring information that is not urgent from a server originally holding the information to an information-request source through a network including a plurality of routers. See page 1, line 9, through page 5, line 16.

Although the AAPA shows substantial features of the claimed invention, it fails to expressly disclose: A relay server adjacent to one of the routers located on a path between the server and the information-request source.

Nevertheless, relay servers were well known in the art at the time of the present invention. In a similar field of endeavor Stiller shows a method for routing traffic in wireless data networks comprising the steps of: Determining at least one relay server adjacent to a router located on a path between a server and an information-request source, wherein the path is set by at least one router in the network; and transferring the information through the path such that each relay server receives the information from upstream, temporarily stores and transmits the same to downstream, (col. 7, lines 2-26).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of AAPA, to implement a relay server adjacent to one of the routers located on a path between the server and the information-request source. This would have shown a well known means for properly handling and routing the information being requested.

13. In considering claims 2, 7, and 12, AAPA teaches the information-request source being a cache server for storing a copy of information that is likely to be accessed by a terminal. See page 1, lines 9-14.

14. In considering claims 3 and 8, AAPA teaches the transfer of information from the server to the cache server being caused by the cache server performing at least one of an automatic cache updating operation, a link prefetching operation and a cache server cooperating operation. See page 1, lines 9-14.

15. Claims 4, 5, 9, 10, 13, are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA, in view of Stiller, and further in view of Horvitz, U.S. Patent 6,067,565.

16. In considering claims 4, 9, and 13, AAPA shows a method, system, and recording medium for transferring information that is not urgent from a server originally holding the information to an information-request source through a network including a plurality of routers. See page 1, line 9, through page 5, line 16.

Although the AAPA shows substantial features of the claimed invention, it fails to expressly disclose: A relay server adjacent to one of the routers located on a path between the server and the information-request source.

Nevertheless, relay servers were well known in the art at the time of the present invention. In a similar field of endeavor Stiller shows a method for routing traffic in

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wireless data networks comprising the steps of: Determining at least one relay server adjacent to one of the routers located on a path between a server and an information-request source, wherein the path is set by at least one router in the network; and transferring the information through the path such that each relay server receives the information from upstream, temporarily stores and transmits the same to downstream, (col. 7, lines 2-26).

Thus, it would have been obvious to one of ordinary skill in the art to modify the teachings of AAPA, to show a relay server adjacent to one of the routers located on a path between the server and the information-request source. This would have shown a well-known means for properly handling and routing the information being requested.

Although the combined teachings of AAPA and Stiller show substantial features of the claimed invention, they fail to expressly disclose: Requesting a transfer of the information during assigned time slots.

Nevertheless, in a similar field of endeavor, Horvitz discloses a technique for prefetching information comprising: Sending a request for transfer of information to an upstream-located server holding the information, at any one time. See col. 1, lines 8-26.

Thus given the teachings of Horvitz, it would have been apparent to one of ordinary skill in the art to modify the combined teachings of AAPA and Stiller to show a plurality of relay servers each having a time slot previously assigned thereto, and when a current time falls into the time slot assigned thereto, sending a request for transfer of the information to an upstream-located server holding the information. This would have



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provided an efficient means for prefetching information during times when network bandwidth is low, and thus, allowing the information to be prefetched without interfering with, or affecting, other network traffic, Horvitz, col. 3, lines 23-37.

17. In considering claims 5, and 10, the teachings of Horvitz provide a means for a time slot assigned to each relay server to be determined depending on where the relay server is installed, wherein the time slot is a time period during which small traffic is predicted in an area where the relay server is installed. See col. 1, lines 8-26.

### ***Conclusion***

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hassan Phillips whose telephone number is (571) 272-3940. The examiner can normally be reached on M-F 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on (571) 272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HP/  
10/7/05

  
**ZARNI MAUNG**  
SUPERVISORY PATENT EXAMINER